APPENDIX A
STAKEHOLDER INTERACTION

This appendix addresses stakeholder issues, including public input to the Least Cost Plan process and specific stakeholder areas of concern. This appendix further provides an overview of PSE's commitment to public involvement in the planning process, and describes its public input process. PSE briefly summarizes the formal Least Cost Plan Advisory Group (LCPAG) and Conservation Resource Advisory Group (CRAG) meetings held to date. Next, in response to the Washington Utilities and Transportation Commission (WUTC) October 3, 2003 letter commenting upon PSE's April 30, 2003 Least Cost Plan and August 2003 Least Cost Plan Update, PSE delineates its response to each comment and points the reader to the Least Cost Plan section that addresses the subject matter for each. The end of this chapter summarizes the major stakeholder issues identified during the Least Cost Plan process to date, organized around major themes. Again, in describing these issues of concern, PSE provides references to relevant portions of the Least Cost Plan.

A. Public Participation

PSE maintains an open commitment to actively encouraging public involvement in its Least Cost Plan process. As of April 30, 2005, ten formal LCPAG meetings, four CRAG meetings, as well as dozens of informal meetings and communications have taken place. Stakeholders that have actively participated in one or more meetings include WUTC staff; the Public Counsel; individual customers from industrial and commercial classes; Northwest Pipeline; conservation and renewable resource advocates; the Northwest Power Planning Council; project developers; other utilities; and the Washington State Department of Community, Trade and Economic Development.

Stakeholder meetings provided a venue for constructive feedback and useful information to guide the least cost planning process. Stakeholder suggestions and practical information were invaluable to the development of this Least Cost Plan. PSE wishes to thank those who attended the least cost planning meetings for the time and energy they devoted to this Least Cost Plan process. PSE encourages the continuation of this active participation as the Company's planning process proceeds.

While the LCPAG and CRAG groups meet separately, they share many common members.

The LCPAG's scope includes all elements of the Least Cost Plan. The CRAG is more narrowly focused on energy efficiency and demand-side resources.

Conservation Resources Advisory Group

Key to the development of PSE's overall demand-side resource strategy is the CRAG. It was formally established as part of the settlement of PSE's 2001 general rate case, which the WUTC approved in Docket Nos. UE-11570 and UG-011571 (called Conservation Agreement). The group's specific purpose is to work with PSE toward the development of energy efficiency plans, targets and budgets. CRAG membership was established by the Conservation Agreement and consists of WUTC staff; Public Counsel, Attorney General's Office; Northwest Power and Conservation Council; Industrial Customers of Northwest Utilities (ICNU); Northwest Industrial Gas Users (NWIGU); NW Energy Coalition and Natural Resources Defense Council; Energy Project (representing Low Income Agencies); Washington State Department of Community, Trade and Economic Development; and DOE Weatherization Assistance Program provider network. In addition to the official CRAG membership, customer representatives have also participated in CRAG meetings including Microsoft, Kemper Development, and King County.

The CRAG participated in the development of the Company's 2005 Least Cost Plan and energy efficiency program review through a series of formal meetings to review and offer feedback on the assessment of all demand-side resources (energy efficiency, fuel conversion, and demand response). Many members of the CRAG also participated in other aspects of PSE's least cost planning advisory process. PSE appreciates the contributions of these organizations and individuals.

The following section provides an overview of the LCPAG and CRAG meetings convened as of April 30, 2005.

Least Cost Plan Advisory Group Kick-off Meeting: February 9, 2004

PSE presented an update on its wind and all-source requests for proposal (RFPs) including a status summary, process schedules and products requested. PSE also discussed 2004 work items for the 2005 Least Cost Plan.

Conservation Resource Advisory Group Meeting: February 9, 2004

This meeting covered the Energy Efficiency RFP process and timeline, a rider/tracker summary, a Conservation and Renewables Discount (C&RD) update, a Measurement and Evaluation Plan Update, a Bonneville Power Administration (BPA) Non-Wires Solution update, and a discussion of topics for future meetings.

Least Cost Plan Advisory Group Meeting: April 14, 2004

PSE presented its working draft of the 2005 Least Cost Plan Table of Contents. The discussion included an overview of the Least Cost Plan schedule. PSE provided a resource acquisition update, involving an overview of the acquisition process, evaluation criteria, wind acquisition goals, and key transaction issues. Finally, Cambridge Economic Research Associates (CERA) led a presentation detailing their North American gas outlook, methodology highlights, scenario process and selected results, as well as regional gas issues.

Least Cost Plan Advisory Group Meeting: June 14, 2004

PSE provided briefings on (1) energy efficiency RFP responses and (2) both wind and all-source RFP progress. Following these briefings, there was a natural gas planning update. The meeting wrapped up with a review of generic electric resource assumptions.

Least Cost Plan Advisory Group Meeting: July 27, 2004

There was a brief, high-level discussion regarding resource acquisitions in which it was mentioned that construction cost risks were a significant concern and that short-listed wind projects were reliant on PSE's ability to access production tax credits (PTC). A presentation regarding demand side resource analysis followed, including a review of demand response technical potential, as well as a plan for updating conservation, fuel conversion and demand response. PSE provided an update on its new long-term planning model and a review of its gas peak-day planning standard. PSE presented an energy efficiency RFP update that outlined the Company's shortlist. Finally, PSE updated the group on its all-source RFP, including stage one process and analysis, short list selections and a stage two process update.

Conservation Resource Advisory Group Meeting: July 27, 2004

This meeting included a 2004 energy efficiency mid-year program summary and an overview of highlights to date. The selection of a project shortlist for the Energy Efficiency RFP and the

schedule for major energy efficiency planning activities, including support for the 2005 Least Cost Plan, were also discussed.

Least Cost Plan and Conservation Resource Advisory Groups Joint Meeting: October 12, 2004
Meeting topics included: the resource acquisition status; financial issues including risk management, credit, and imputed debt; and the electric and gas planning status. Quantec gave a presentation on its 2005-2024 Demand-Side Resource Analysis Preliminary Results including the scope and framework of its analysis, its methodology, technical and achievable potentials for electric and gas energy efficiency (residential and commercial use), demand response, and fuel conversion. Quantec also outlined upcoming steps in its process, which focused on such areas as energy efficiency, fuel conversion and demand response.

Conservation Resource Advisory Group Meeting: October 12, 2004
This meeting covered selection of the finalist projects from the Energy Efficiency RFP process and presented the draft results of the 2005 Least Cost Plan demand-side resource potential assessment for energy efficiency, fuel conversion, and demand response.

Least Cost Plan Advisory Group Meeting: November 9, 2004
PSE began this meeting with a presentation on the regional transmission situation, outlining constraints and regional efforts toward resolution. Additionally, the Company pointed out challenges to resolving these issues as well as the pros and cons of PSE's options in light of the current situation. PSE followed this a discussion of short- and long-term gas markets, an overview of existing gas resources and an update on potential resources (both peaking and base load). Next, PSE provided information about its electric modeling process flow and analytic improvements. Finally, the long-term risk management group presented hedging team report highlights, a list of goals for meeting PSE's long-term energy cost risk management strategy, a position assessment, and an evaluation of alternatives.

Least Cost Plan Advisory Group Meeting: December 8, 2004
PSE provided an update on its long-term risk management project. This was followed by an overview of the Hopkins Ridge wind project and development schedule. Next, the Company then presented CERA's recently released 2004 Rear View Mirror gas price forecast within the confines of the confidentiality terms outlined in its contract with CERA. PSE discussed its electric planning environment for the 2005 Least Cost Plan, and identified key issues including

transmission, environmental considerations, new demand-side resources, financial issues, the resource development process and gas price forecast. PSE then gave a presentation on how the Company plans to use portfolios and scenarios to analytically explore its key issues. Greenhouse gas and carbon costs dominated this discussion. PSE addressed the current gas planning environment, identifying key issues such as the decrease in liquidity at Sumas as producers sell more gas at Station 2. Finally, PSE presented the key uncertainties facing its gas Least Cost Plan analysis including long-term pricing, price volatility, and load uncertainty.

Least Cost Plan Advisory Group Meeting: January 12, 2005

PSE presented the gas and electric portfolio and scenario combinations to be tested in the Least Cost Plan. LCPAG participants were encouraged to ask questions and offer feedback regarding these scenarios. The meeting wrapped up with an overview of developments pertaining to the following hydro resources: the Baker River and Snoqualmie Falls hydroelectric projects, the White River Project, and PSE's Mid-Columbia contracts.

Least Cost Plan Advisory Group Meeting: February 9, 2005

The meeting convened with brief progress updates on PSE's Electric Modeling and Gas Planning efforts. This was followed by a detailed discussion of the Company's customer and sales forecasts, including specific modeling information, forecast assumptions, results and uncertainties. BPA then gave a presentation on the current regional transmission situation, which involved information about current projects, transmission line constraints, no wires solutions and other related issues.

Conservation Resource Advisory Group Meeting: February 9, 2005

This meeting covered the final results of the 2005 Least Cost Plan demand-side resource potential assessment for energy efficiency, fuel conversion, and demand response. Further information included a 2004 energy efficiency year-end program summary and an overview of program highlights. A discussion of topics for future meetings concluded the presentation.

Least Cost Plan Advisory Group Meeting: March 24, 2005

This was the final meeting prior to the preparation of PSE's 2005 Least Cost Plan external draft document. PSE provided information on the draft electric and gas analytical results. Also presented was an overview of the electric and gas key conclusions and acquisition strategies.

B. Additional Regulatory Direction

Following the submittal of PSE's previous Least Cost Plan and Least Cost Plan Update, the WUTC issued a letter dated October 3, 2003 from Ms. Carole J. Washburn, Executive Secretary, to Mr. Steve Reynolds, President and Chief Executive Officer, Puget Sound Energy. The letter accepted the plan and provided a list of 12 specific recommendations for PSE's next Least Cost Plan. Each of the recommendations for this Least Cost Plan is set forth below, along with references to the chapters where a more detailed discussion of the topic can be found.

1. Recommendation - Modeling: *"The Company should refine its modeling techniques using information quarried from journals of economics, operations research, and optimization as well as the software market. A better set of software tools may emerge to aid the industry in dealing with increasing price and market risk. In particular, we encourage exploration of a system built upon a foundation of mathematical programming instead of human judgment and simulation alone. PSE should also continue to invest in the human capital necessary to successfully carry out its planning effort."*

Incorporation into Plan: PSE continues to advance its analytical capabilities. Information about improvements to the electric methodology and tools can be found in Chapter X. This plan also marks the initial use of Sendout and Vector Gas models for long-term natural gas resource planning. A complete discussion of the gas methodology and tools can be found in Chapter XIV. PSE believes its plan has a solid analytical and mathematical base. PSE has also improved its internal planning capability. Since the previous plan, PSE has formed an energy resource planning group staffed with six employees.

2. Recommendation - Modeling: *"We anticipate further research and thought in the area of decision-making. The balance of risk between ratepayer and investor clearly affects the resource strategy the Company favors. It also is implicit in the modeling assumptions used. Thus, a continued emphasis is needed on the assessment and balancing of risk throughout managerial decision-making."*

Incorporation into Plan: As part of its long-term risk management project, discussed in Chapter XV, PSE is studying the value customers place on energy price risk.

3. Recommendation - Modeling: *"We want greater transparency in the underlying data, assumptions, and mechanisms modeled in the forecast of natural gas prices at the major Northwest delivery points. If current consultants cannot provide details on the construction of its forecast, then other consultants should be selected."*

Incorporation into Plan: Chapter V provides detail about the short- and long-term gas price forecasts used by PSE. It also provides information about the Company's decision-making process for choosing its long-term forecast, the reasons why PSE does not develop an in-house long-term forecast, and the significant benefits of using a long-term forecast generated by a national firm specializing in natural gas pricing. A representative for CERA spoke on April 14, 2004 to the LCPAG group to provide the background on the gas forecast scenarios.

4. Recommendation - Electricity: *"Although PSE annually updates and frequently reviews its demand forecast, the synthetic assumptions regarding component load shapes is a shortcoming. Some empirical work on component load shapes could make a significant improvement. PSE should explicitly consider some additional load research and end-use modeling."*

Incorporation into Plan: As described in Chapter VI, section B, PSE has updated its methodology for producing hourly load shapes. Since the previous Least Cost Plan, PSE has also completed a Residential Appliance Saturation Survey to inform its estimates of energy efficiency potential and its load forecast.

5. Recommendation - Electricity: *"Gas and electric plans both strongly depend on the forecast of natural gas prices. Better price forecasts would improve both. Price forecasts should be transparent to the reader and should provide sufficient detail to reveal assumptions and methodology. The presentation or accompanying technical appendices should include macroeconomic assumptions, the effects of likely gas pipeline operations, the differences in gas demand in regions of the US, and the process of exploration, development and operations of gas wells. The plan should explicitly describe any underlying models and statistical format. These would include, among others, R-squared, t-statistic, D-W statistic."*

Incorporation into Plan: See response to recommendation 3 above.

6. Recommendation - Electricity: *"The supply alternatives considered cover the major fuel types. However, a longer list of resources would be preferable. The Company should consider specific current technologies at their offered prices, more generic alternatives, and new technologies reasonably close to commercialization. Of course, the option of purchasing new contracts to replace those that expire should be included in the supply alternatives."*

Incorporation into Plan: PSE considers a wide range of generic resource alternatives including emerging technologies in developing its Least Cost Plan. From the range of alternatives, PSE selects proven technologies, representing the various resource types that could be reasonably expected to be included in PSE's portfolio, to evaluate through detailed analytical models. The analytical methodology and generic resource alternatives are set forth in Chapter X. Outside the Least Cost Plan, PSE does further analyses and comparisons of current and emerging technologies.

7. Recommendation - Electricity: *"The research on wind power is very helpful. Additional work should concentrate on reliability issues to determine what extra capacity resource is needed for adequate system reliability. In this matter, we encourage cooperation with other electric utilities and regional bodies."*

Incorporation into Plan: PSE continues to study wind reliability and integration issues. Appendix C provides more details on wind integration issues and costs.

8. Recommendation - Natural Gas: *"The gas planning model used by PSE is respected in the field. However, the model appears to have limited ability to assess and model risk. PSE should carefully consider whether these capabilities can be added to the current model or if a search for new tools should be made."*

Incorporation into Plan: PSE replaced U-Plan-G with Sendout and the risk analysis add-in Vector gas, as well as the required computing infrastructure, for its long-term gas resource modeling needs. Sendout is widely used in the industry, including several other gas utilities in the Pacific Northwest. Vector Gas is a new risk analysis add-in for Sendout. PSE's Least Cost Plan is the first long-term resource plan to use the Vector Gas risk analysis module to analyze price and temperature risk. Additional information about the model can be found in Chapter XIV and Appendix H.

9. Recommendation - Natural Gas: *"A gas design day is a "stress case" which represents an extreme for which planned Company operation will be adequate. In past plans, the Company used a 1-in-50-year standard of extreme weather events, a 55 heating-degree-day observed in 1949-1950. This plan used a 51 heating-degree-day as design day, a 1-in-20-year standard of protection. This change will make PSE's current system capacity, built for 1-in-50 standard, adequate for a longer period of time. It will also allow more capacity to be available for capacity release activity.*

"Although the change does not seem great in magnitude, the plan was silent as to the effect of this change. The Company has said that the 1-in-20-year is closer to the industry standard. Nevertheless, a study of the benefits and costs of the change, including an assessment for the likelihood of re-light events is needed. PSE should analyze and defend the new gas design day standard in its next plan. For guidance, PSE may want to revisit work done in the TAC meetings surrounding the 1995 Washington Natural Gas Least Cost Plan."

Incorporation into Plan: PSE performed a probabilistic benefit/cost analysis on peak-day planning standards and updated its planning standard from 51 to 52 HDD. A detailed account of the analysis supporting the new peak day planning standard can be found in Appendix I. It was presented at the LCPAG meeting on June 14, 2004.

10. Recommendation: Natural Gas: *"The Company should explore opportunities for obtaining gas supply contracts at fixed prices for durations of a decade or more. This exploration should be in collaboration with other LDCs in Washington state and the region."*

Incorporation into Plan: The Company has explored the options to secure long-term fix-priced gas supply. Such supplies are beginning to become more available and are described in more detail in Chapter XIII. However, long-term fix-priced gas supply contracts create significant credit issues and counter-party credit management issues, described more in Chapter IV.

11. Natural Gas: *"The area of distribution planning should have contained discussion of the Everett-Delta project as well as the Whidbey LNG facility as examples of detailed specific events for discussion."*

Incorporation into Plan: A robust discussion of distribution planning can be found in Chapter XVI.

12. Conservation: *"The Company expanded its consideration of conservation alternatives in its August 31 [2003] filing. As PSE expands its conservation efforts, we urge the Company to supplement information from the NWPPC database with data and expertise from other organizations and consultants."*

Incorporation into Plan: Chapter VII of this Least Cost Plan describes PSE's planning efforts in the area of demand-side resources. The chapter includes detailed information about the conservation analysis, methodology and results used by PSE in its planning process. For specific information about the main data sources used in these studies, refer to Chapter VII. This Least Cost Plan used information from NWPCC, consultants, and PSE's own expertise to develop its conservation estimates.